

Date: \_\_\_\_\_

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## Grade 7: Math

### Unit Test Review

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- Fractions.

- Addition and Subtraction.

1.  $\frac{2}{7} + \frac{5}{7} + \frac{1}{7}$

5.  $\frac{1}{2} + \frac{3}{4} + \frac{1}{2}$

9.  $\frac{1}{2} + \frac{5}{8} + \frac{3}{4}$

2.  $\frac{2}{3} + \frac{7}{3} + \frac{4}{3}$

6.  $\frac{2}{3} + \frac{5}{6} + \frac{1}{6}$

10.  $\frac{2}{3} + \frac{5}{15} + \frac{1}{6}$

3.  $\frac{5}{4} + \frac{1}{4} + \frac{3}{4}$

7.  $\frac{2}{7} + \frac{5}{21} + 1$

11.  $\frac{1}{5} + \frac{3}{6} + \frac{1}{4}$

4.  $\frac{1}{6} + \frac{2}{6} + \frac{1}{6}$

8.  $\frac{3}{5} + \frac{18}{25} + \frac{2}{5}$

12.  $\frac{2}{7} + \frac{5}{4} + \frac{1}{14}$

13.  $3\frac{1}{5} + 1\frac{1}{5}$

17.  $15\frac{2}{11} - 2\frac{10}{11}$

21.  $2\frac{1}{10} + \frac{3}{20}$

14.  $4\frac{2}{7} + \frac{3}{7}$

18.  $3\frac{5}{7} + 8\frac{2}{11}$

22.  $7\frac{1}{6} - 5\frac{1}{24}$

15.  $2\frac{2}{5} - \frac{4}{5}$

19.  $3\frac{1}{24} - 1\frac{1}{15}$

23.  $2\frac{1}{4} + 10\frac{1}{8} + 4\frac{1}{12}$

16.  $4\frac{21}{71} + 11\frac{13}{71}$

20.  $5\frac{3}{20} - 4\frac{2}{5}$

24.  $20\frac{23}{25} - 16\frac{48}{50}$

25. Jack is painting a fence. He paints  $\frac{1}{5}$  of the fence on Monday,  $\frac{1}{2}$  on Tuesday and  $\frac{3}{20}$  on Wednesday. What fraction of the fence is yet to be painted?

26. In the Grand Opera musical concert,  $\frac{1}{5}$  of the band consists of violinists,  $\frac{1}{4}$  are flutists and  $\frac{3}{25}$  play percussions. The remaining are pianists. What fraction of the band are pianists?

27. Alice, Bob and Charlie were given tasks. Alice completes  $\frac{3}{5}$  of the task given to her, Bob finishes  $\frac{5}{8}$  and Charlie has  $\frac{3}{10}$  of his task to be completed. Who has completed the most amount of work? Who has completed the least amount of work?

28. Katie is reading a story book. She reads  $2\frac{1}{2}$  pages in the morning,  $\frac{1}{3}$  page before lunch. How many pages did she read?

29. Sofia and Katie ran a race. Sofia ran  $\frac{2}{7}$  km while Katie ran  $\frac{3}{14}$  km. Who ran more and by how much?

## ○ Multiplication and Division.

1.  $\frac{2}{7} \times \frac{5}{4}$

5.  $\frac{1}{2} \div \frac{3}{7}$

9.  $5\frac{1}{2} \div \frac{5}{8}$

2.  $\frac{2}{3} \times \frac{7}{3}$

6.  $\frac{2}{3} \div 4\frac{5}{6}$

10.  $5 \times \frac{5}{15}$

3.  $\frac{5}{4} \div \frac{1}{10}$

7.  $\frac{2}{7} \div 4$

11.  $3\frac{1}{5} \div \frac{3}{6}$

4.  $\frac{1}{3} \times \frac{1}{2} \times \frac{1}{6}$

8.  $\frac{3}{5} \div \frac{18}{25}$

12.  $2\frac{2}{7} \times 3$

13. State the multiplication rule for fractions.

14. State the division rule for fractions

15. A class of 12 students shared a pizza. If each student ate

16.  $\frac{2}{3}$  of a pizza, how much pizza did they all have together?17. Janice bought 20 bags of sugar, each containing  $1\frac{1}{5}$  kg of sugar. What was the total weight of all the bags combined?18. Mr. Oest places an order for chemical X for his Chemistry class. Each bottle of c contains  $3\frac{2}{7}$  g of chemical X. If Mr. Oest orders 21 bottles how much chemical X does Mr. Oest have?

19. Six sevenths of a pizza is to be eaten by three friends. How much does each friend get, if the pizza is shared equally.

20. Ms. Philip has a  $14\frac{2}{8}$  inch long banner which she wants to cut into  $2\frac{1}{5}$  inch long strips. How many strips does she have?

21. Mike has 15 cupcakes. He eats three fifths of the cupcakes he had. How many cupcakes did Mike eat? How many are left?

- Decimals

- |                                   |                                  |                                       |
|-----------------------------------|----------------------------------|---------------------------------------|
| 1) $9.2 + 2 \times 5$             | 2) $(5.8 + 6.8) \div 0.9$        | 3) $1.5^2 - 0.009$                    |
| 4) $14.4 \div (16.3 - 13.9)$      | 5) $0.45 \times 0.02 \div 0.03$  | 6) $4.3^2 \times 0.11 - 4.59$         |
| 7) $(1.39 + 0.29)^2$              | 8) $5 \times 2 \div 0.04 + 0.07$ | 9) $(0.24 + 0.36) - 5^2$              |
| 10) $(5.1 \div 3) - (7 \div 0.2)$ | 11) $(15 - 0.4 \times 2) + 7.1$  | 12) $7.1 - 2^3 \times 3 \div (8 - 2)$ |

- Percents

- Convert the percents to fractions.

- |        |        |            |         |
|--------|--------|------------|---------|
| a. 11% | g. 25% | m. 125%    | s. 13%  |
| b. 3%  | h. 36% | n. 87.5%   | t. 24%  |
| c. 4%  | i. 45% | o. 19%     | u. 0.2% |
| d. 7%  | j. 20% | p. 117%    | v. 90%  |
| e. 28% | k. 78% | q. 150%    | w. 45%  |
|        |        |            | .       |
| f. 54% | l. 5%  | r. 100000% | x. 66%  |

- Convert the fractions to percents.

- |                   |                   |                    |                     |
|-------------------|-------------------|--------------------|---------------------|
| a. $\frac{4}{25}$ | c. $2\frac{1}{2}$ | e. $\frac{23}{25}$ | g. $1\frac{13}{50}$ |
| b. $\frac{4}{5}$  | d. $\frac{3}{50}$ | f. $\frac{17}{20}$ | h. $\frac{19}{25}$  |

- Convert the fractions to percents.

- |                   |                   |                    |                    |
|-------------------|-------------------|--------------------|--------------------|
| a. $\frac{4}{7}$  | c. $5\frac{1}{3}$ | e. $\frac{23}{11}$ | g. $1\frac{1}{13}$ |
| b. $\frac{4}{15}$ | d. $\frac{1}{6}$  | f. $\frac{5}{21}$  | h. $2\frac{2}{3}$  |

- Convert these decimals to percents

a. 0.31	g. 2.5	m. 1.75	s. 13.0
b. 0.83	h. 0.36	n. 47.5	t. 0.24
c. 0.994	i. 0.045	o. 0.019	u. 0.0452
d. 0.07	j. 0.2	p. 17.1	v. 0.009
e. 2.8	k. 78.0	q. 0.15	w. 4.55
			.
f. 0.04	l. 5.0	r. 0.001	x. 1.066

1. Samuel bought a television for \$450. If 10% tax was charged on the television, what was the tax worth in dollars.
2. A class has 125 students. If 16% of the class is boys. How many boys are there in the class?
3. A class has 125 students. If 16% of the class is boys. How many girls are there in the class?
4. Samuel bought a television for \$450. If he paid \$ 35 as tax, what was the tax percent on the TV?
5. The Simpsons family ordered food at the diner. The bill included 15% tax charged on the original amount. What percent of the original bill did the Simpsons have to pay?
6. Katie buys a pair of jeans worth \$65 sold at 10% discount. How much money did she save?
7. Sofia is travelling to the zoo, which is 14,000m away from her house. She sleeps for 1575 km while travelling. What percent of the journey was she awake?
8. Frostie Flakes cereal has 17% sugar, while Choco-real cereal has 15% sugar. If Sofia has 102g of Frostie Flakes and Jack has 123g of Choco-real, who consumed more sugar?
9. Jack bought a PS4 for \$490. If 16% tax was charged on the console, what was the tax worth in dollars.
10. A group has 315 students. If 60% of the class is boys. How many boys are there in the class?
11. A class has 315 students. If 80% of the class is boys. How many girls are there in the class?
12. Jacob has completed 42.5% of his task how much of it is left?
13. The Simpsons family ordered food at the diner. The bill included \$12 tax charged on the original amount of \$75. What percent of the bill was tax?
14. Katie is travelling to the zoo, which is 14,000m away from her house. She sleeps for 15% of the journey. For what distance was Sofia awake?

15. Jackson has completed 37% of his task how much of it is left?
16. A class has 125 students. If there are 65 boy in the class, what percent of the class are boys?
17. In a class there are 125 girls and 45 boys. What percent of the class are girls? [Hint: Find the total number of children in the class]
18. A computer has completed 37 out of 50 tasks. What percent of the work is left?
19. The Simpsons family ordered food at the diner. The bill included \$25 tax charged on the original amount of \$145. What percent of the bill was tax?
20. Katie buys a pair of jeans worth \$65 sold at new price \$45 discount. What was the discount on the jeans? [Hint: Find the discount in dollard first].
21. Sofia is travelling to the zoo, which is 14,000m away from her house. She sleeps for 15% of the journey. For what distance was Sofia awake?
22. Frostie Flakes cereal has 23g sugar in a 120g box, while Choco-real cereal has 15g sugar in a 145g box. What cereal has more percentage sugar?
23. Janet bought a television for \$650. If she paid \$ 75 as tax, what was the tax percent on the TV?
24. A band has 425 musicians. There are 120 painists, 45 flutists, 25 percussionists and the remaining are violinists. Find the percentage of each type of musician.
25. In a class there are 55 girls and 25 boys. What percent of the class are girls? [Hint: Find the total number of children in the class]
26. A computer has completed 45 out of 250 tasks. What percent of the work is left?
27. An internet bill included 8% tax charged on the original amount. What percent of the original bill was paid?
28. Katie buys a pair of jeans worth \$85 sold at new price \$35 discount. What was the discount on the jeans? [Hint: Find the discount in dollard first].

